

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: )  
SCHMAUS et al. ) Applications  
)  
)  
Serial No. Not Assigned )  
)  
Filed: )  
)  
For: DISTILLATION OF STYRENE )

PRELIMINARY AMENDMENT

Hon. Commissioner of Patents and Trademarks  
Washington, D.C. 20231

Sir:

Prior to examination, kindly amend the above-identified application as follows.

IN THE CLAIMS

Please amend the claims as shown in the attached sheets.


REMARKS

The claims have been amended to eliminate multiple dependency. No new matter has been added. A clean copy of the claims is attached.

Entry of the above amendment is respectfully solicited.

Respectfully submitted,

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CLAIMS -CLEAN VERSION - OZ 0050/51631

3. A process as defined in claim 1, wherein 4-tert-butylcatechol is fed to the distillation apparatus concurrently with the vinylaromatic monomer, the concentration of 4-tert-butylcatechol in the distillation bottoms being in the range of from 200 to 15,000 ppm based on the vinylaromatic monomer.
4. A process as defined in claim 1, wherein the vacuum distillation is carried out at temperatures ranging from 40° to 125°C.
5. A process as defined in claim 1, wherein an oxygen-containing gas is metered into the distillation bottoms through a gas spray.
6. A process as defined in claim 1, wherein an oxygen-containing gas is metered in on the suction side of a circulating pump mounted upstream of the distillation assembly.
7. A process as defined in claim 1, wherein the oxygen is fed in at a rate of from 0.01 to 0.5 wt%, based on the weight of vinylaromatic monomer.

0050/51631 - CLEAN VERSION

CLAIMS - MARKED UP VERSION - OZ 0050/51631

3. A process as defined in claim 1 [or claim 2], wherein 4-tert-butylcatechol is fed to the distillation apparatus concurrently with the vinylaromatic monomer, the concentration of 4-tert-butylcatechol in the distillation bottoms being in the range of from 200 to 15,000 ppm based on the vinylaromatic monomer.
4. A process as defined in [any of claims 1 to 3] claim 1, wherein the vacuum distillation is carried out at temperatures ranging from 40° to 125°C.
5. A process as defined in [any of claims 1 to 4] claim 1, wherein an oxygen-containing gas is metered into the distillation bottoms through a gas spray.
6. A process as defined in [any of claims 1 to 5] claim 1, wherein an oxygen-containing gas is metered in on the suction side of a circulating pump mounted upstream of the distillation assembly.
7. A process as defined in [any of claims 1 to 6] claim 1, wherein the oxygen is fed in at a rate of from 0.01 to 0.5 wt%, based on the weight of vinylaromatic monomer.

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CURRENT CLAIMS - OZ 0050/51631

1. A process for the distillation of vinylaromatic monomers in the presence of 4-tert-butylcatechol (TBC) and oxygen, wherein no aromatic nitro or amino compound is present in any effective amount.
2. A process as defined in claim 1, wherein the vinylaromatic monomer used is styrene.
3. A process as defined in claim 1, wherein 4-tert-butylcatechol is fed to the distillation apparatus concurrently with the vinylaromatic monomer, the concentration of 4-tert-butylcatechol in the distillation bottoms being in the range of from 200 to 15,000 ppm based on the vinylaromatic monomer.
4. A process as defined in claim 1, wherein the vacuum distillation is carried out at temperatures ranging from 40° to 125°C.
5. A process as defined in claim 1, wherein an oxygen-containing gas is metered into the distillation bottoms through a gas spray.
6. A process as defined in claim 1, wherein an oxygen-containing gas is metered in on the suction side of a circulating pump mounted upstream of the distillation assembly.
7. A process as defined in claim 1, wherein the oxygen is fed in at a rate of from 0.01 to 0.5 wt%, based on the weight of vinylaromatic monomer.